



**Department of
Environmental Protection
Bureau of Land & Water Quality May 2005
O&M Newsletter**

A monthly newsletter for wastewater discharge licensees, treatment facility operators, and associated persons

DMR-QA Study 25 Update

The annual DMR-QA Announcement Package was sent to the printers for printing and mailing on April 28th. You should have received it by now unless your address has changed since last year due to Enhanced 911.

You are encouraged to verify the receipt of Study 25 via email, if possible. The address is dmrqa@epa.gov for those with Internet access. Please follow the sample response email format in the instructions. Otherwise, you should use a copy of the Address Verification Form included in this year's package. John Helm's address is on the form.

Read the DMR-QA Study 25 Schedule and post a copy of it in your lab for future reference. It would be wise to enter the various deadlines into your laboratory calendar now so that you won't miss any important ones.

Use copies of the forms in your booklet for reporting purposes later. This way you will have the entire booklet for your DMR-QA file. You may want to refer to it next spring when you start thinking about DMR-QA 26 matters. Photocopy everything that you send to anybody concerning DMR-QA, including your Provider Laboratory's Data Forms and your Data Packages, of course.

Everybody should be doing great lab work with all the QA/QC training recently.

Ken Jones
287-4869

Spring 2005 Exam

The Spring Wastewater Exam was given in the usual locations on Wednesday, May 11, 2005. Results should be available in 4 to 6 weeks. Applications for the Fall exam, which will be given on November 9, 2005 must be postmarked on or before September 23, 2005 or hand delivered to the DEP Augusta Office on September 26, 2005.

Dick Darling

For Practice

1. A circular clarifier treats a flow of 1,600,000 gpd with an influent suspended solids of 2,300 mg/L. The diameter is 40 feet and the depth is 15 feet. What is the solids loading?
 - a. 14.2 lb/day/sq. ft.
 - b. 19.7 lb/day/sq. ft.
 - c. 24.4 lb/day/sq. ft.
 - a. 33.6 lb/day/sq. ft.
2. A filamentous bacteria that causes foaming but does not usually effect sludge settling is:
 - a. *S. natans*
 - b. *H. hydrossis*
 - c. *Type 021N*
 - d. *Nocardia*
3. The age of the sludge in and activated sludge facility affects the dewaterability as follows:
 - a. Older sludge is harder to dewater.
 - b. Older sludge is easier to dewater.
 - c. Younger sludge is easier to dewater.
 - d. Sludge age has no effect on dewaterability.
4. One horsepower is equivalent to
 - a. 378.2 joules
 - b. 0.75 amps at a voltage of 220
 - c. 746 watts
 - d. 1,000 megahertz

Approved Training

May 16, 2005 in Concord, NH – The Activated Sludge Process - Sponsored by NHWPCA & NHDES - 603-271-2940 – Approved for 6 hours

May 18, 2005 in Augusta, ME - Optimizing Clarifier Performance and Flow Measurement - Sponsored by JETCC - 207-253-8020 – Approved for 6 hours

June 23, 2005 in Mars Hill, ME – 9th Annual Lagoon Day – Sponsored by MRWA – 207-729-6569 – Approved for 4 hours

Note:

JETCC stands for Joint Environmental Training Coordinating Committee
MRWA stands for Maine Rural Water Association

NHWPCA stand for New Hampshire Water Pollution Control Association

Former Beals Mussel Processor Ordered to Pay Penalty

Hon. John V. Romei of the Fourth District Court in Machias has issued an Order requiring a former Beals mussel processor to pay a penalty of @28,063 for discharging pollutants without a license. The company processed mussels for a total of 100 days beginning in June 2002 until it permanently shut down in April 2003. Even though the facility was shut down, the Department chose to pursue enforcement action, by first proposing an Administrative Consent Agreement. However, the Department and the violator were unable to reach an agreement acceptable to both parties so the Department filed a complaint in District Court. The Order was signed on April 4, 2005.

Answers to *For Practice*:

1. c. The sludge loading to the clarifier is $1.6 \text{ MG} \times 2,300 \text{ mg/L} \times 8.34 = 30,691 \text{ lb/day}$
The area of the clarifier is $40 \text{ ft} \times 40 \text{ ft} \times 0.785 = 1,256 \text{ sq.ft.}$
The loading is $30,691 \text{ lb/day} / 1,256 \text{ sq.ft} = 24.4 \text{ lb/day/sq.ft.}$
2. d. *Nocarida* is a filamentous bacteria which causes foaming without usually effecting the settleability of the sludge
3. b. In general, an older, more oxidized sludge is easier to dewater than younger sludges.
4. c. 1 horsepower is equal to 746 watts or 0.746 kilowatts (kW).